

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,390	11/20/2003	Ronald F. Palermo	10670013010202	9732
37211 75	590 04/18/2006		EXAMINER	
BASCH & NICKERSON LLP 1777 PENFIELD ROAD			WOLLSCHLAGER, JEFFREY MICHAEL	
PENFIELD, NY 14526			ART UNIT	PAPER NUMBER
			1732	
			DATE MAILED: 04/18/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
		10/718,390	PALERMO ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Jeff Wollschlager	1732	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address	
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	DN. timely filed  m the mailing date of this communication. NED (35 U.S.C. § 133).	
Status				
2a) <u></u>	Responsive to communication(s) filed on <u>20 Not</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowant closed in accordance with the practice under Expression in the practice of the practice	action is non-final. ace except for formal matters, p		
Dispositi	on of Claims			
5)□ 6)⊠ 7)□	Claim(s) <u>1-19</u> is/are pending in the application.  4a) Of the above claim(s) <u>14-19</u> is/are withdraw Claim(s) is/are allowed.  Claim(s) <u>1-13</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or			
Applicati	on Papers			
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on 20 November 2003 is/ar Applicant may not request that any objection to the consequent drawing sheet(s) including the correction to the oath or declaration is objected to by the Example 1.	re: a)⊠ accepted or b)⊡ object frawing(s) be held in abeyance. S on is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).	
Priority u	ınder 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachmen	t(s)			
2) 🔲 Notica 3) 🔯 Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>1/26/04; 10/06/05</u> .	4) Interview Summal Paper No(s)/Mail   5) Notice of Informal   6) Other:		

### **DETAILED ACTION**

#### Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13, drawn to the method of forming an integrated ornamental surface, classified in class 264/34.
- II. Claims 14-19, drawn to a concrete floor, classified in class 52/315.

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as altering an in-situ concrete floor to have a terrazzo like appearance.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i

During a telephone conversation between Examiner Jessica Laux and Mr. Basch on March 14, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

## Claim Objections

Claim 11 is objected to because of the following informalities: The claim does not end with a period. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw et al. (U.S. Patent 6,033,146; issued March 7, 2000).

Regarding claim 1, Shaw et al. teach a method for forming a decorative concrete material with integrated aggregate comprising the steps: Ø) Preparing and forming the region upon which the monolithic concrete floor is to be poured (col. 3, lines 31-33), a) contiguously pouring concrete throughout the formed region (col. 3 lines 42-45), b) floating the concrete to effectively densify the concrete (col. 3, lines 53-55 and 57-60), c) allowing the concrete to cure to a semi-stiff state (concrete is inherently semi-stiff as

evidenced by col. 4, lines 14-16), d) finishing the exposed upper surface to produce a generally planar surface (col. 3, lines 53-55 and 57-60), e) disbursing a quantity of decorative aggregate over the semi-stiff concrete surface (col. 3, line 65 – col. 4, line 5), f) integrating the aggregate into the upper surface of the semi-stiff concrete (col. 4, line 17-19), g) allowing the concrete with the integrated aggregate to at least partially cure (col. 4, lines 27-30 and 55), h) grinding the upper surface with the integrated aggregate therein (col. 4, lines 63-65) and l) polishing the upper surface with the integrated aggregate (col. 4, lines 63-65).

As to claim 2, Shaw et al. teach the aggregate particulate is approximately 3/8", which is approximately 9 mm (col. 4, line 5).

As to claims 3-5, Shaw et al. teach the aggregate comprises naturally occurring materials such as seashells and various metals as well as man-made materials such as glass and composite materials (col. 4, lines 1-5).

As to claim 7, Shaw et al. teach the concrete may be colored (col. 3, line 50).

As to claims 8-10, Shaw et al. teach that the top surface may be treated with a hydrolyzed alkali silica solution sealer which results in the formation of an insoluble silicate structure on the surface of the concrete (col. 4, line 65 – col. 5, line 15). As acknowledged by the applicant (U.S. Patent Application Publication 2004/0159073 paragraphs [0042, 0049], for example) silicate sealers inherently function as both a hardening and sealing compound.

Application/Control Number: 10/718,390 Page 5

Art Unit: 1732

Claims 1, 3, 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Paoli (U.S. Patent 2,835,996; issued May 27, 1958).

Regarding claim 1, Paoli teaches a method for forming a decorative concrete material with integrated aggregate comprising the steps: Ø) Preparing and forming the region upon which the monolithic concrete floor is to be poured (inherent), a) contiguously pouring concrete throughout the formed region (col. 2, lines 39-40 and 47-56), b) floating the concrete to effectively densify the concrete (col. 2 lines 63-65 with a trowel), c) allowing the concrete to cure to a semi-stiff state (col. 2, lines 59-61 and 69), d) finishing the exposed upper surface to produce a generally planar surface (col. 2, lines 63-65), e) disbursing a quantity of decorative aggregate over the semi-stiff concrete surface (col. 2 line 65-70), f) integrating the aggregate into the upper surface of the semi-stiff concrete (col. 2, line 65-70), g) allowing the concrete with the integrated aggregate to at least partially cure (col. 2, line 72 – col. 3, line 2), h) grinding the upper surface with the integrated aggregate therein (col. 3, lines 2-5) and I) polishing the upper surface with the integrated aggregate (inherently polished by squeegeeing and flushing with water col. 3, lines 5-6).

As to claims 3 and 4, Paoli teaches that the aggregate is marble or granite (col. 1, line 35).

As to claim 7, Paoli teaches coloring the concrete mix (col. 2, lines 2-4).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146; issued March 7, 2000).

As to claim 6, Shaw et al. teach the method of claim 1 as discussed in the 102(b) rejection above but do not explicitly teach that the semi-stiff state is determined by a one-quarter inch depression resulting from an applied normal force of between about 4 and 5 pounds per square inch. However, Shaw et al. teach a semi-stiff state of the concrete such that the particulate is prevented from impressing into the surface of the concrete before it is so desired (col. 4, lines 14-16) and further teach defining a semi-stiff state such that a finger impression not in excess of three-eighths of an inch deep is made in the concrete upon manually pressing with the fingertips (col. 4, lines 26-30). Therefore, it would have been obvious to one of ordinary skill in the art to arrive at the same semi-stiff state taught by the applicant because both the method of Shaw et al. and the applicant's are defined in such general terms as to make them effectively undifferentiated from a standpoint of patentability.

As to claim 13, Shaw et al. do not teach scoring the concrete floor with a diamond saw to facilitate uniform stress relief. However, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the claimed invention to employ a

diamond saw to score the concrete floor to facilitate uniform stress relief for the purpose of providing expansion or contraction joints to prevent the concrete from cracking.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146; issued March 7, 2000) in view of Jones et al. (U.S. Patent 6,454,632; issued September 24, 2002).

As to claims 8-10, Shaw et al. teach the method of claim 1 as discussed in the 102(b) rejection above and further teach applying a sealer that inherently hardens the upper surface of the concrete. Shaw et al. do not explicitly state that hardening the surface is the purpose for or result of applying the sealer. However, Jones et al. teach a method of applying a diluted silicate based hardening compound to the surface of concrete (Abstract). It is noted that Jones et al. also recognize that this hardening compound improves the hydrophobic characteristics of the concrete surface (col. 2, lines 43-46) further supporting the inherent argument in the 102(b) rejection above.

Therefore it would have been *prima facie* obvious to one of ordinary skill in the art to take the method of Shaw et al. and apply a hardening compound as taught by Jones et al. because one of ordinary skill would readily recognize the complementary nature of the two methods and would be motivated to protect the surface provided by the method of Shaw et al. and to further enhance the aesthetic qualities as would be provided by employing the method taught by Jones et al. (col. 2, lines 23-50).

As to claim 11, Shaw et al. teach the method of claims 1 as discussed in the 102(b) rejection above, but do not provide details regarding the grinding method.

However, Jones et al. teach grinding and polishing the concrete surface with

increasingly finer grit material until the surface obtains an aesthetically desirable level of shine (col. 2, line 66 – col. 3, line 25). Therefore it would have been *prima facie* obvious to one of ordinary skill in the art to take the method of Shaw et al. and employ the grinding and polishing technique taught by Jones et al. because one of ordinary skill would readily recognize the complementary nature of the two methods and would be motivated to protect the surface provided by the method of Shaw et al. and to further enhance the aesthetic qualities as would be provided by employing the method taught by Jones et al. (col. 2, lines 23-50).

Further, it is well known in the concrete and lapidary arts, as evidenced by the readily available commercial grinding and polishing machines and grinding discs to employ cutting heads of diamonds, silicon carbide and a bonding material (e.g. carborundum, sandpaper), and fine grit diamond pads as needed to achieve the desired finished product depending on the type of aggregate used, the degree of concrete cure, and the ultimately desired surface texture and shine of the product. So one of ordinary skill in the art would have to take all of these variables into consideration when determining the specific grinding steps and grinding materials. As such, this is a recognized control variable for grinding in the concrete and lapidary arts and would have been readily optimized. (See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)). Therefore it would have been obvious to employ the grinding technique as claimed. As such, the invention as a whole is rendered obvious over the combined teaching of the prior art.

As to claim 12, Jones et al. teach repeating the steps until the upper surface has a shine (col. 3, lines 1-5) and further including applying a surface treatment to the

polished upper surface where the surface treatment is a chemical reactive concrete stabilizer providing a densified upper surface (col. 3, lines 5-25). Further, as acknowledged by the applicant in the Information Disclosure Statement, applying a surface treatment of a chemical reactive concrete stabilizer is well known and commercially available with products such as Retro Plate 99®.

#### Conclusion

All claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/718,390 Page 10

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 $\omega_{\mathcal{I}}$ 

Jeff Wollschlager Examiner Art Unit 1732

April 5, 2006

MARK EASHOO, PH.D PRIMARY EXAMINER

17/ Apr/66